

RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/559,639A
Source: 1.FWD
Date Processed by STIC: 3/20/07

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RAW SEQUENCE LISTING

DATE: 03/20/2007

PATENT APPLICATION: US/10/559,639A

TIME: 14:59:41

Input Set : N:\efs\03_20_07\10559639A_efs\SeqListingRev1.txt

Output Set: N:\CRF4\03202007\J559639A.raw

3 <110> APPLICANT: Ben-Yehuda, Dina
 4 Ashhab, Yaqoub
 5 Nachmias, Boaz
 7 <120> TITLE OF INVENTION: Livin-derived peptides, compositions and uses thereof
 9 <130> FILE REFERENCE: 16033/US/03
 11 <140> CURRENT APPLICATION NUMBER: 10/559,639A
 C--> 13 <141> **CURRENT FILING DATE: 2005-12-02**
 13 <150> PRIOR APPLICATION NUMBER: IL 156263
 14 <151> PRIOR FILING DATE: 2003-06-02
 16 <150> PRIOR APPLICATION NUMBER: PCT/IL2004/000461
 17 <151> PRIOR FILING DATE: 2004-05-31
 19 <160> NUMBER OF SEQ ID NOS: 11
 21 <170> SOFTWARE: PatentIn version 3.3
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 246
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Homo sapiens
 28 <400> SEQUENCE: 1
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 35 20 25 30
 38 Gly Ser Glu Glu Leu Arg Leu Ala Ser Phe Tyr Asp Trp Pro Leu Thr
 39 35 40 45
 42 Ala Glu Val Pro Pro Glu Leu Leu Ala Ala Ala Gly Phe Phe His Thr
 43 50 55 60
 46 Gly His Gln Asp Lys Val Arg Cys Phe Phe Cys Tyr Gly Gly Leu Gln
 47 65 70 75 80
 50 Ser Trp Lys Arg Gly Asp Asp Pro Trp Thr Glu His Ala Lys Trp Phe
 51 85 90 95
 54 Pro Ser Cys Gln Phe Leu Leu Arg Ser Lys Gly Arg Asp Phe Val His
 55 100 105 110
 58 Ser Val Gln Glu Thr His Ser Gln Leu Leu Gly Ser Trp Asp Pro Trp
 59 115 120 125
 62 Glu Glu Pro Glu Asp Ala Ala Pro Val Ala Pro Ser Val Pro Ala Ser
 63 130 135 140
 66 Gly Tyr Pro Glu Leu Pro Thr Pro Arg Arg Glu Val Gln Ser Glu Ser
 67 145 150 155 160
 70 Ala Gln Glu Pro Gly Gly Val Ser Pro Ala Glu Ala Gln Arg Ala Trp
 71 165 170 175
 74 Trp Val Leu Glu Pro Pro Gly Ala Arg Asp Val Glu Ala Gln Leu Arg
 75 180 185 190
 78 Arg Leu Gln Glu Glu Arg Thr Cys Lys Val Cys Leu Asp Arg Ala Val

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82 Ser Ile Val Phe Val Pro Cys Gly His Leu Val Cys Ala Glu Cys Ala
83      210          215          220
86 Pro Gly Leu Gln Leu Cys Pro Ile Cys Arg Ala Pro Val Arg Ser Arg
87 225          230          235          240
90 Val Arg Thr Phe Leu Ser
91          245
94 <210> SEQ ID NO: 2
95 <211> LENGTH: 228
96 <212> TYPE: PRT
97 <213> ORGANISM: Homo sapiens
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106      - 20          25          30
109 Gly Ser Glu Glu Leu Arg Leu Ala Ser Phe Tyr Asp Trp Pro Leu Thr
110      35          40          45
113 Ala Glu Val Pro Pro Glu Leu Leu Ala Ala Ala Gly Phe Phe His Thr
114      50          55          60
117 Gly His Gln Asp Lys Val Arg Cys Phe Phe Cys Tyr Gly Gly Leu Gln
118 65          70          75          80
121 Ser Trp Lys Arg Gly Asp Asp Pro Trp Thr Glu His Ala Lys Trp Phe
122      85          90          95
125 Pro Ser Cys Gln Phe Leu Leu Arg Ser Lys Gly Arg Asp Phe Val His
126      100          105          110
129 Ser Val Gln Glu Thr His Ser Gln Leu Leu Gly Ser Trp Asp Pro Trp
130      115          120          125
133 Glu Glu Pro Glu Asp Ala Ala Pro Val Ala Pro Ser Val Pro Ala Ser
134      130          135          140
137 Gly Tyr Pro Glu Leu Pro Thr Pro Arg Arg Glu Val Gln Ser Glu Ser
138 145          150          155          160
141 Ala Gln Glu Pro Gly Ala Arg Asp Val Glu Ala Gln Leu Arg Arg Leu
142      165          170          175
145 Gln Glu Glu Arg Thr Cys Lys Val Cys Leu Asp Arg Ala Val Ser Ile
146      180          185          190
149 Val Phe Val Pro Cys Gly His Leu Val Cys Ala Glu Cys Ala Pro Gly
150      195          200          205
153 Leu Gln Leu Cys Pro Ile Cys Arg Ala Pro Val Arg Ser Arg Val Arg
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161 <210> SEQ ID NO: 3
162 <211> LENGTH: 298
163 <212> TYPE: PRT
164 <213> ORGANISM: Homo sapiens
166 <400> SEQUENCE: 3
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173          20          25          30
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177          35          40          45
180 Asp His Val Asp Gly Gln Ile Leu Gly Gln Leu Arg Pro Leu Thr Glu
181          50          55          60
184 Glu Glu Glu Glu Glu Gly Ala Gly Ala Thr Leu Ser Arg Gly Pro Ala
185 65          70          75          80
188 Phe Pro Gly Met Gly Ser Glu Glu Leu Arg Leu Ala Ser Phe Tyr Asp
189          85          90          95
192 Trp Pro Leu Thr Ala Glu Val Pro Pro Glu Leu Leu Ala Ala Gly
193          100         105         110
196 Phe Phe His Thr Gly His Gln Asp Lys Val Arg Cys Phe Phe Cys Tyr
197          115         120         125
200 Gly Gly Leu Gln Ser Trp Lys Arg Gly Asp Asp Pro Trp Thr Glu His
201          130         135         140
204 Ala Lys Trp Phe Pro Ser Cys Gln Phe Leu Leu Arg Ser Lys Gly Arg
205 145          150         155         160
208 Asp Phe Val His Ser Val Gln Glu Thr His Ser Gln Leu Leu Gly Ser
209          165         170         175
212 Trp Asp Pro Trp Glu Glu Pro Glu Asp Ala Ala Pro Val Ala Pro Ser
213          180         185         190
216 Val Pro Ala Ser Gly Tyr Pro Glu Leu Pro Thr Pro Arg Arg Glu Val
217          195         200         205
220 Gln Ser Glu Ser Ala Gln Glu Pro Gly Gly Val Ser Pro Ala Glu Ala
221          210         215         220
224 Gln Arg Ala Trp Trp Val Leu Glu Pro Pro Gly Ala Arg Asp Val Glu
225 225         230         235         240
228 Ala Gln Leu Arg Arg Leu Gln Glu Glu Arg Thr Cys Lys Val Cys Leu
229          245         250         255
232 Asp Arg Ala Val Ser Ile Val Phe Val Pro Cys Gly His Leu Val Cys
233          260         265         270
236 Ala Glu Cys Ala Pro Gly Leu Gln Leu Cys Pro Ile Cys Arg Ala Pro
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241          290         295
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246 <212> TYPE: PRT
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249 <400> SEQUENCE: 4
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255 Ser His Trp Ala Ala Gly Asp Gly Pro Thr Gln Glu Arg Cys Gly Pro
256          20          25          30
259 Arg Ser Leu Gly Ser Pro Val Leu Gly Leu Asp Thr Cys Arg Ala Trp
260          35          40          45
263 Asp His Val Asp Gly Gln Ile Leu Gly Gln Leu Arg Pro Leu Thr Glu
264          50          55          60

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267 Glu Glu Glu Glu Glu Gly Ala Gly Ala Thr Leu Ser Arg Gly Pro Ala
268 65              70              75              80
271 Phe Pro Gly Met Gly Ser Glu Glu Leu Arg Leu Ala Ser Phe Tyr Asp
272              85              90              95
275 Trp Pro Leu Thr Ala Glu Val Pro Pro Glu Leu Leu Ala Ala Ala Gly
276              100             105             110
279 Phe Phe His Thr Gly His Gln Asp Lys Val Arg Cys Phe Phe Cys Tyr
280              115             120             125
283 Gly Gly Leu Gln Ser Trp Lys Arg Gly Asp Asp Pro Trp Thr Glu His
284              130             135             140
287 Ala Lys Trp Phe Pro Ser Cys Gln Phe Leu Leu Arg Ser Lys Gly Arg
288 145             150             155             160
291 Asp Phe Val His Ser Val Gln Glu Thr His Ser Gln Leu Leu Gly Ser
292              165             170             175
295 Trp Asp Pro Trp Glu Glu Pro Glu Asp Ala Ala Pro Val Ala Pro Ser
296              180             185             190
299 Val Pro Ala Ser Gly Tyr Pro Glu Leu Pro Thr Pro Arg Arg Glu Val
300              195             200             205
303 Gln Ser Glu Ser Ala Gln Glu Pro Gly Ala Arg Asp Val Glu Ala Gln
304              210             215             220
307 Leu Arg Arg Leu Gln Glu Glu Arg Thr Cys Lys Val Cys Leu Asp Arg
308 225             230             235             240
311 Ala Val Ser Ile Val Phe Val Pro Cys Gly His Leu Val Cys Ala Glu
312              245             250             255
315 Cys Ala Pro Gly Leu Gln Leu Cys Pro Ile Cys Arg Ala Pro Val Arg
316              260             265             270
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320              275             280
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324 <211> LENGTH: 27
325 <212> TYPE: DNA
326 <213> ORGANISM: Artificial Sequence
328 <220> FEATURE:
329 <223> OTHER INFORMATION: Primer for site-directed mutagenesis
331 <400> SEQUENCE: 5
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335 <210> SEQ ID NO: 6
336 <211> LENGTH: 24
337 <212> TYPE: DNA
338 <213> ORGANISM: Artificial Sequence
340 <220> FEATURE:
341 <223> OTHER INFORMATION: Primer for site-directed mutagenesis
343 <400> SEQUENCE: 6
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347 <210> SEQ ID NO: 7
348 <211> LENGTH: 18
349 <212> TYPE: DNA
350 <213> ORGANISM: Artificial Sequence;
352 <220> FEATURE:

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Input Set : N:\efs\03_20_07\10559639A_efs\SeqListingRev1.txt

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353 <223> OTHER INFORMATION: Mega-primer to introduce mutation D52E
 355 <400> SEQUENCE: 7
 356 cgtggaaggg cagatcct 18
 359 <210> SEQ ID NO: 8
 360 <211> LENGTH: 19
 361 <212> TYPE: DNA
 362 <213> ORGANISM: Artificial Sequence
 364 <220> FEATURE:
 365 <223> OTHER INFORMATION: Mega-primer to introduce mutation D238E
 367 <400> SEQUENCE: 8
 368 ccagggaagt agaggcgca 19
 371 <210> SEQ ID NO: 9
 372 <211> LENGTH: 41
 373 <212> TYPE: DNA
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 376 <220> FEATURE:
 377 <223> OTHER INFORMATION: Primer to construct cleavage fragment
 379 <400> SEQUENCE: 9
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 386 <213> ORGANISM: Artificial Sequence
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 389 <223> OTHER INFORMATION: Livin-Exp-F
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 398 <213> ORGANISM: Artificial Sequence
 400 <220> FEATURE:
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 403 <400> SEQUENCE: 11
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VERIFICATION SUMMARY

DATE: 03/20/2007

PATENT APPLICATION: US/10/559,639A

TIME: 14:59:42

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L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date